Understanding Community Resilience through Data- basing and Data-mining



Project Title	Understanding Community Resilience through Data-basing and Data-mining
Project Summary	Populate and mine a searchable database of community improvement projects completed through university partnerships with local agencies / communities. This will help provide clues as to how municipalities throughout the country address challenges including those associated with resilience.
Country	United States

Project Description

Every day municipalities throughout the country are challenged with prioritizing which of their many needs to address with limited resources. These challenges include economic development, well-being of residents, protecting the local infrastructure and environment and complying with regulations. In the scheme of things, municipalities may or may not prioritize actions focused on enhancing their resilience – i.e., ability to withstand, recover from, and adapt to major system shocks, e.g., flooding, fires, earthquakes, and extreme weather events.

The extent to which and how communities evaluate, plan for, and/or invest in resilience, and their degree of success are open questions. To develop suitable resilience guidance for communities, it would be valuable to better understand what communities typically plan for and invest in with respect to resilience, what are barriers, and what works.

Throughout the U.S., local governments have been partnering with universities to advance priority projects using the Educational Partnerships for Innovation in Communities (EPIC) model. Across a range of programs, universities with EPIC Programs have completed more than 1000 projects with local governments that were identified as priorities by their local partners. These projects address a broad suite of needs related to economic development, community revitalization, human well-being, sustainability and resilience. Student interns will help populate a searchable database of the more than 1,000 community improvement projects. This will include date of completion, policy area, partnering community, university program, faculty and courses engaged, the number and level of students and hours deployed, issues, solutions, and recommendations. Once populated, analysis of data can be performed depending on program needs and intern interest.

Required Skills or Interests

Skill(s)

Additional Information

Other important skills include: Attention to detail; Computer fluency; Curiosity; Ability to ask questions; Ability to work iteratively; Comfortable working virtually. Preferred, but not required: Experience managing large data sets; Coding; Google suite and Microsoft office suite; and Data analysis.

EPA is committed to assisting local governments in improving community health, sustainability and resiliency; and is interested in EPIC because the model allows local governments and communities to tap into the abundance of capacity within universities. EPIC-N also provides a venue through which EPA can share and advance local and national strategies, tools and priorities. A partnership with EPIC-N provides access to the information and database. Student interns will be working with a diverse team with representatives from EPA's Office of Research and Development (ORD), Pacific Southwest Regional Office, and EPIC-N.

Language Requirements

None